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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,946

04/13/2004

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EXAMINER

GRAHAM, PAUL J

ART UNIT

PAPER NUMBER

2623

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/823,946

Applicant(s)

JUTZI, CURTIS E.

Examiner

Paul J. Graham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/13/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On paragraph [0005] "...user needs to utilized ..." is not correct tense, should read: "...user needs to utilize...". Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs, which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

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In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

3. Claims 10-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 10 defines a machine-readable medium embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory encoded with a computer program and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed computer-readable medium can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arad et al. (US 2005/0081245 A1) in view of Beckmann et al. (US 6675388 B1).

As to claim 1, Arad discloses a method comprising:

determining a last channel a television was tuned to prior to being turned off (see Arad [0089] channel signature data is available for recall “at any particular time” to determine last channel tuned);

determining whether the last channel is a radio frequency remodulated (RF-remodulated) channel (see Arad, [006,0009, 0010, 0075] for RF remodulated channel, if the tuner is on line (as in [0091]) then it has been determined to be an RF remodulated channel);

if the last channel is a RF-remodulated channel, then sending a signal to indicate that the television is on line with the RF-remodulated channel (see Arad [0091] TV is on line once it has been tuned);

and changing the television to the cable channel (see Arad [0091] for changing the TV and it is to the cable given that alignment between STB and TV has been established (i.e., “on line” from above));

if a tuner is not available for the television, then receiving an indication of a cable channel that was last RF-remodulated to the RF-remodulated channel for the television (see Arad [0081] for indication of channel remod, “based upon detected channel”);

however, Arad does not expressly teach multiple tuners in a STB. Beckmann, who discloses a data distribution system does teach multiple tuners in a STB available for

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downstream presentation devices (such as a television) (see Beckmann, fig. 3 and col. 4, ll. 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Arad with the system of Beckmann so that multiple channels could be tuned to simultaneously (see Beckmann, col. 2, ll. 35-43).

6. Claims 4, 7, 10, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arad et al. (US 2005/0081245 A1) in view of Beckmann et al. (US 6675388 B1) in further view of Itoh et al. (US 2004/0068737 A1).

As to claim 4, claim 4 is similar to claim 1 except that a remote control is recited. Therefore, claim 4 is analyzed similarly to claim 1 except for the remote control discussed below.

Arad does disclose a remote control (see Arad [0079 & 0089]); however, it may not explicitly show all the functionality that is recited in claim 4. Itoh, who discloses a method of TV channel selection, does teach a remote control unit that shows that functionality (see Itoh, [0009 & 0022]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Arad with the method of Itoh so that the channel alignment changes could be made remotely (see Itoh, [0009]).

As to claims 7, 10, 13, and 16, claim 7 recites a system, claims 10 and 13 recite a machine-readable medium and claim 16 recites an apparatus, but each are similar to claim 4 (and therefore claim 1) and are analyzed similarly to claim 4 (and claim 1) (see above).

7. Claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arad et al. (US 2005/0081245 A1) in view of Beckmann et al. (US 6675388 B1) in further view of Itoh et al. (US 2004/0068737 A1) in further view of Harger et al. (US 4566034).

As to claim 5, Arad, Beckmann, and Itoh (as combined for claim 4) disclose the method of claim 4; however, a channel change is not taught.

Harger, who discloses a remote control, does teach by the remote control, a channel up signal; and changing the television to an adjacent cable channel one above the cable channel with the remote control (see Harger, col. 2, ll. 59-67, note CU and col. 11, ll. 9-20 where skip list includes all available channels (see Harger, col. 14, ll. 1-15), figs. 2 and 3A).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Arad with the remote control channel changing functionality of Harger in order to automate the remote channel changing function (see Harger, col. 2, ll. 39-49).

As to claim 6, Arad, Beckmann, and Itoh (as combined for claim 4) disclose the method of claim 4, and Harger teaches the method further comprising: receiving, by the remote control, a channel down signal; and changing the television to an adjacent cable channel one below the cable channel with the remote control (see Harger, col. 2, ll. 59-67, note CD and col. 11, ll. 9-20 where skip list includes all available channels (see Harger, col. 14, ll. 1-15)).

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As to claims 2, 8, 11, 14, 17, they are similar to claim 5 and therefore are analyzed similarly to claim 5 (see above).

As to claims 3, 9, 12, 15, 18, they are similar to claim 6 and therefore are analyzed similarly to claim 6 (see above).

8. Claims 2-3, 5-6, 8-9, 11-12, 14-15, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arad et al. (US 2005/0081245 A1) in view of Beckmann et al. (US 6675388 B1) in further view of Itoh et al. (US 2004/0068737 A1) in further view of Pauley (US 5900916).

As to claim 5, Arad, Beckmann, and Itoh (as combined for claim 4) disclose the method of claim 4; however, a channel change is not taught.

Pauley, who discloses a remote control, does teach by the remote control, a channel up signal; and changing the television to an adjacent cable channel one above the cable channel with the remote control (see Pauley, col. 3, ll. 30-50, and col. 5, ll. 55-60 for "remote control" unit).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Arad with the remote control channel changing functionality of Pauley in order to automate the remote channel changing function (see Pauley, col. 3, ll. 30-40).

As to claim 6, Arad, Beckmann, and Itoh (as combined for claim 4) disclose the method of claim 4, and Pauley teaches the method further comprising: receiving, by the remote control, a channel down signal; and changing the television to an adjacent cable

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channel one below the cable channel with the remote control (see Pauley, col. 3, ll. 30-50, and col. 5, ll. 55-60 for “remote control” unit).

As to claims 2, 8, 11, 14, 17, they are similar to claim 5 and therefore are analyzed similarly to claim 5 (see above).

As to claims 3, 9, 12, 15, 18, they are similar to claim 6 and therefore are analyzed similarly to claim 6 (see above).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wignot (US 5532733) teaches remodulation of STB output to UHF.

Inquiries

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul J. Graham whose telephone number is 571-270-1705. The examiner can normally be reached on Monday-Friday 8:00a-5:00p EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

pjg
10/12/2007



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